Listing of the Claims

1. (Currently Amended)   A method for the computer-assisted visualization of a three-dimensional anatomical object, comprising the following method steps:

a)   recording two or more diagnostic image data records ~~(1, 3, 4, 5)~~ of the object;

b)   defining an imaging specification for imaging the image data ~~(1, 3, 4, 5)~~ onto a two-dimensional display plane ~~(8)~~, wherein in order to define the imaging specification anatomical features ~~(2)~~ of the object are identified in at least one of the image data records ~~(1)~~;

c)   calculating a combined two-dimensional representation by imaging the two or more image data records ~~(1, 3, 4, 5)~~ according to the previously defined imaging specification onto the common display plane ~~(8)~~.

2. (Currently Amended)   A method as claimed in claim 1, wherein in order to define the imaging specification an object volume ~~(7)~~ delimited by a curved surface is determined in which the anatomical features ~~(2)~~ of the object that are to be identified are contained.

3. (Currently Amended)   A method as claimed in claim 2, wherein according to the imaging specification a projection of the image information of the data records ~~(1, 3, 4, 5)~~ that is contained in the object volume ~~(7)~~ is calculated during the calculation of the two-dimensional representation.

4. (Currently Amended)   A method as claimed in claim 3, wherein in order to calculate the two-dimensional representation Cartesian coordinates within the display plane ~~(8)~~ are assigned to non-Cartesian surface coordinates ~~(U, φ)~~ of the object volume ~~(7)~~.

5. (Currently Amended)   A method as claimed in ~~any of~~ claims 1 ~~to~~ 4, wherein at least one image data record comprises morphological image information of the anatomical object and at least one further image data record ~~(3, 4, 5)~~ comprises functional image information relating to the anatomical object.

6. (Original)   A method as claimed in claim 5, wherein the functional image information is obtained by evaluating temporal sequences of morphological image data of the anatomical object.

7. (Currently Amended)   A method as claimed in ~~any of~~ claims 1 ~~to 6~~, wherein at least one of the image data records ~~(3, 4, 5)~~ comprises at least one slice image of the anatomical object.

8. (Currently Amended)   A method as claimed in ~~any of~~ claims 1 ~~to 7~~, wherein the image data records are recorded by means of computer tomography, magnetic resonance or ultrasound.

9. (Currently Amended)   A method as claimed in ~~any of~~ claims 1 ~~to 8~~, wherein the image data records are recorded using different imaging modes.

10. (Currently Amended)   A diagnostic imaging device with recording means ~~(18, 20)~~ for recording three-dimensional image data records of an anatomical object ~~(2)~~, and with computer means ~~(16, 21)~~ for visualizing the image data, wherein the computer means ~~(16, 21)~~ have program control, by means of which a method as claimed in ~~any of~~ claims 1 ~~to 9~~ can be carried out.

11. (Currently Amended)   A computer program for a diagnostic imaging device, wherein a method as claimed in ~~any of~~ claims 1 ~~to 9~~ is implemented by the computer program on the computer means ~~(16, 21)~~ of the imaging device.